



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,574	03/28/2001	Dieter Blase	608.0008USU	2561

7590

08/17/2004

Charles N.J. Ruggiero, Esq.
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.
10th Floor
One Landmark Square
Stamford, CT 06901-2682

EXAMINER

MENON, KRISHNAN S

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,574

Applicant(s)

BLASE ET AL.

Examiner

Krishnan S Menon

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22 and 26-39 are pending is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22 and 26-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 22 and 26-39 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 22-32 and 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Garcera et al (US 5,062,910).

Claim 22,27 and 28 recite a ceramic filter element having plurality of channels through the element, and ends smaller in outer dimension than the main body, which is taught by Garcera. See figures and col 2 lines 5-10, wherein machining the end to a smaller diameter (as in fig 6 of the applicant's disclosure) is taught. Garcera teaches having sealing ring on the terminals (ends) of the element (see figures 8 and 10), which surround the terminal region, and abuts a shoulder (see abstract and figures 8 and 10) as in claim 22.

Claims 36 and 37 recite a ceramic element having a main part having a larger outer dimension than a terminal region (covered under the rejection of claim 22), and have the newly added limitation of a foil reinforcement at the first terminal region. Applicant has not provided any structural details of this 'foil reinforcement' in the specification or drawings. Foil means a thin sheet metal (Webster's Collegiate Dictionary, 10th Ed). Garcera'910 col 2 lines 66-68 teaches among other things, metal

Art Unit: 1723

for support (reinforcement). Figure 11 and 12 of Garcera'910 also teaches metal bellows for the terminal region.

Claim 29 recites a membrane module formed by the element as in claim 22 – see Garcera figures 1 and 5.

Claim 26, 30 and 39: cross section of the element selected from circular, etc – see Garcera figures.

Claims 35, 38: A shoulder defined by the main part and the terminal region as in claim 38 is inherent in Garcera when machined as taught in col 2 lines 5-10. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d, 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The seals are made to abut the shoulder as in claim 35 (see abstract and figures)

Claim 31: Garcera teaches a module having a housing (12) enclosing a plurality of elements (20), a cover for the terminal region having plurality of openings (14) and the finished seal (44-fig 8) between the terminal region and the openings (see fig 5 and 8)

Claim 32: terminal region is reinforced: see col 2 line 46 – col 3 line 5 where the shoulder support is discussed with different materials as in a reinforcement.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1723

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22-32 and 35-39 are rejected, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Garcera (910)

Claim 22, 27 and 28 recite a ceramic filter element having plurality of channels through the element, and ends smaller in outer dimension than the main body, and having sealing ring on the terminals (ends) of the element, which surround the terminal region and abuts a shoulder. Garcera teaches a ceramic filter element having plurality of channels through the element, with terminal regions having shoulders and sealing rings in the figures and abstract. Garcera also teaches truncated ends of the elements as seen in figures 5 and 12, which can be of same, larger or smaller in dimension compared to the body of the filter, and with the sealing ring of same material (col 2 lines 65-68), would provide final product having an equivalent structure to what is claimed by the applicant, for the purpose of sealing. In this case, the prior art element:

(A) performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000)

(B) is not excluded by any explicit definition provided in the specification for an equivalent. A person of ordinary skill in the art would have recognized the interchangeability of the element shown in the prior art for the corresponding element

Art Unit: 1723

disclosed in the specification. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987).

(C) is an equivalent of the claimed element. There are insubstantial differences between the prior art element and the corresponding element disclosed in the specification. *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436, 54 USPQ2d 1129, 1138 (Fed. Cir. 2000); *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 117 S. Ct. 1040, 41 USPQ2d 1865, 1875 (1997); *Valmont Industries, Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 25 USPQ2d 1451 (Fed. Cir. 1993). See also *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000) the prior art element is a structural equivalent of the corresponding element disclosed in the specification. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). That is, the prior art element performs the function specified in the claim in substantially the same manner as the function is performed by the corresponding element described in the specification

Claims 36 and 37 recite ceramic element having plurality of flow channels and a main part having dimension larger than a terminal region (rejection covered in claim 22 above), and have the newly added limitation of a foil reinforcement at the first terminal

Art Unit: 1723

region. Applicant has not provided any structural details of this 'foil reinforcement' in the specification or drawings. Foil means a thin sheet metal (Webster's Collegiate Dictionary, 10th Ed). Garcera'910 col 2 lines 66-68 teaches among other things, metal for support (reinforcement). Figure 11 and 12 of Garcera'910 also teaches metal bellows for the terminal region.

Claim 29 recites a membrane module formed by the element as in claim 22 – see Garcera figures 1 and 5.

Claim 26, 30 and 39: cross section of the element selected from circular, etc – see Garcera figures.

Claims 35, 38: A shoulder defined by the main part and the terminal region as in claim 38 is inherent in Garcera when machined as taught in col 2 lines 5-10. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d, 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The seals are made to abut the shoulder as in claim 35 (see abstract and figures)

Claim 31: Garcera teaches a module having a housing (12) enclosing a plurality of elements (20), a cover for the terminal region having plurality of openings (14) and the finished seal (44-fig 8) between the terminal region and the openings (see fig 5 and 8)

Claim 32: terminal region is reinforced: see col 2 line 46 – col 3 line 5 where the shoulder support is discussed with different materials as in a reinforcement.

3. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcera (910) in view of Garcera (et al (US 4,849,104).

Garcera teaches all the limitations of claim 31, but does not teach the details of the module re the permeate outlet or the structure of the cover as having an inner plate and an outer plate. Garcera (104) teaches these limitations (see fig 1 and 10 for permeate outlet and figures 6A-6C, and 8-10 for the cover plate details). It would be obvious to one of ordinary skill in the art at the time of invention to use the teachings of Garcera (104) in the teaching of Garcera (910) because Garcera (910) does not show the details of permeate outlet and Garcera (104) teaches a robust way of having a compression seal for the elements (see abstract of '104).

Response to Arguments

Applicant's arguments filed 6/21/04 have been fully considered but they are not persuasive.

Arguments re claim 29: Applicants argue that the figures of Garcera'910 show ends that are larger, not smaller, than the main body [of the ceramic filter element]: Examiner agrees that the figures depict the ends as larger. However, the figures show the construction of the module using the 'preferred embodiments' of the ceramic filter element. Garcera teaches reducing the dimension of the ends as not preferred in col 2 lines 5-10. Applicants' argument that the Garcera col 2 lines 5-10 is non-enabling is also not correct. Disparaging or describing associated problems is not non-enabling. To be non-enabling, there must be a showing that the disclosure would not work, which

the applicants have failed to do; to the contrary, applicants' claims do show that the Garcera disclosure *is enabling*. A reference is no less anticipatory if, after disclosing the invention, the reference then disparages it. The question whether a reference "teaches away" from the invention is inapplicable to an anticipation analysis. *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998). Applicants' argue that reducing the dimension of the terminal region according to Garcera is non-enabling. Yet, applicants have reduced dimension in the terminal region in claim 29 without having added structure in claim 29 that would make the so called "non-enabling" become enabling.

Argument re claim 36: please see the rejection.

Arguments re the amended claim 22 are also addressed in the rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1723


extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan Menon
Patent Examiner


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700